

Sustainable Development and Environment

Introduction-controversies in India.

Meaning and concept.

Origin and history.

Why the concept has become significant?

Balance between development and exploitation

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Conclusion.

Controversy has surrounded many major development and infrastructure projects in India, such as the Sardar Sarovar dam on the river Narmada, the Chilka Lake in Orissa, the Konkan Railways, the East Coast Road, etc. Objections to these projects pertain to the extent of environmental destruction and uprooting of human settlements such projects may cause. But these environmental and social costs have been justified by the government and other protagonists as essential for any kind of development. This dichotomy reflects the essence of the debate around sustainable development. The process of resolving the perceived conflict between environment and development in all these issues, and the actual solutions that are worked out, will indicate whether the concept of sustainable development is implementable in a country like India.

Not only in India but almost everywhere in the world, 'sustainable development' has become the new buzz-word. Every international agency-from the World Bank to the UNICEF –and almost every country is talking of it. But what does this sustainable development mean?

“Sustainable development is development that meets the needs of the present without compromising the ability of the future generations to meet their own needs.” This definition has been offered by the World Commission on Environment and Development (WCED) in its report 'Our Common Future' (1987) and widely accepted. Economists define it as an economic progress in which the quantity and quality of our stocks of natural resources (like forests) and the integrity of bio-geochemical cycles (like climate) are sustained and passed on, unimpaired. to future generations. ‘

The eminent Indian economist, Sukhamoy Chakravarty has pointed out that the success of 'sustainable development' lies in the fact that it says nothing precise and, therefore, means anything to anybody! For a logging company it can mean sustained projects; for an environmental economist it can mean sustained stocks of natural forests; for a social ecologist it can mean sustained use of the forest; and for an environmentalist it can mean a clean heritage for our children. As a western joke goes now, sustainable development for multinational companies, many of which have also embraced the concept, means simply 'sustained growth' or 'sustained profits'.

Leaving aside its many uses (and misuses), 'sustainable' here simply means keeping something going for an 'indefinite' period of time. However, when governments and industrial interests talk of 'sustainable' extraction of coal from coal fields, or oil from oilfields, or coral from coral reefs, or of 'sustainable' farming by modern methods (which depend on the input of finite fossil fuels), it is often out of ignorance, greed, or with an intent to mislead. The notion of sustainable development or sustainable 'exploitation' is not new; it has been with us for well over 100 years. Until the very recent past, however, it had not crept into conservation strategy. Today, the word 'sustainable' is tacked on to every major facet of human activity.

In its modern form, 'sustainable development' was born and developed in the World Conservation Strategy produced jointly in 1980 by the IUCN, WWF and UNEP. It aimed "to help advance the achievement of sustainable development through the conservation of living resources." It declared that "conservation, like development, is for the people", and thus implicitly assigned to all other species plant or animal a status of existence that is primarily for human use. That is the way all future development was to take place and be judged.

The concept assumed immense importance against the backdrop of the growth of human population and modern man's indiscriminate and unbridled exploitation of environment to gratify his ever-growing hunger for prosperity. The two factors may soon exhaust the environmental resources and the planet will then not help in the survival of even human beings. People and planners must accept that there is a finite amount of habitable land and water on this earth. A specific concern is that those who enjoy the fruits of economic development today may be making future generations worse off by over-exploitation of the natural resources and polluting the earth's environment.

Adding to the problems caused by population growth is the economic explosion. During the twentieth century, world economy has expanded twenty times and industrialisation has increased by a factor of five since 1950. This boom has

depleted stocks of ecological capital (fuel, forests, soils, species, fisheries, water, atmosphere, etc.) faster than such stocks can be replenished. Our own success thus threatens to become our undoing.

Environmental degradation has already been massive. Yet not many seem to be aware of it. The natural resources are being exploited without much consideration for the future generations. Because of the holes in the ozone shield and the accumulation of greenhouse gases, the world as a whole may already be on a critical threshold. Indications of ecological degradation only reveal that economic growth of the present kind which depends on consuming the earth's natural and environmental resources is not sustainable. Thus, human survival and development today, more than ever, depend on two critical factors—a check on the population and a successful 'management' rather than 'exploitation' of the world's natural resources.

The process of economic transformation in recent years is seen to have involved a rapid increase in the scale of human pressure on the environment and also radical structural transformation, particularly in terms of urbanisation and industrialisation. Threats to the environment can be linked directly with these rapid changes in several different ways. For example, as population expands, people move into previously 'empty' areas, generally involving destruction of various species of flora as well as fauna. Quite a different form of environmental degradation results from effluents, smoke and other waste produced by industrial operations. The crowding of people into urban areas requires sanitary, transport and housing arrangements which are more complex and often more costly than those in the countryside, and all are accompanied by varying degrees of pollution.

Sustainability can never be absolute. It is not plausible that all-natural resources can or even need to be preserved. Successful development will inevitably involve some amount of land clearing, oil "drilling, river-damming, and swamp draining. But economic development and sound environmental management are complementary aspects of the same agenda. Without adequate environmental protection, development will be undermined; and without development, environmental protection will fail.

Each society experiments and learns from its own mistakes. Sustainable development cannot be thrust upon anyone by an external agent—whether it is the World Bank, the UNO, or the forestry department of a government—simply because it believes, at any point of time, that it has learnt all the lessons there are to learn. That will be a process towards unsustainable development.

Strong public institutions and environmental protection policies seem to be essential. Policy reforms must focus on changing agricultural and industrial practices so as to reduce drastically the amount of pollution, wastes and other environmental damage per unit of output. Environmental impacts need to be recognised; policies aimed at changing behaviour should rely heavily on economic incentives. Early action to prevent degradation will usually be much cheaper than attempting to reverse it later.

Maybe there should be a retrospective study of past practices especially in agriculture to see if they could not be applied with modifications to suit present needs. Several farmers are, indeed, discarding chemical fertilisers and pesticides and going back to traditional manures and biological pest control. Such steps certainly help towards making development sustainable.

Responsive and effective institutions must be developed. Dissemination of information and analysis must be improved to assist in setting up priorities, and formulating policies. In the formulation of policies and decision-making, effective participation of the people on the spot should be ensured. Finding and implementing solutions to environment problems requires a partnership of efforts among nations. Industrial countries should assist in the transfer of less-polluting technology to the developing countries. These combined with other technical assistance, would help developing countries to avoid or at least reduce environmental degradation. Further the industrial countries must take the lead in formulating and funding solutions to problems of worldwide concern as they have been the primary culprits on environment spoilage. But, above all, unless and until the world community strives in concert, to check population growth, no measure can work effectively.

People have always used the earth's resources and it is unreasonable now, with exploding populations, to expect them to stop. The solution to the human thrust on nature is not to cordon nature off, but to encourage wisdom in the exploitation of it, with the motto: "You must give back to the earth what you take from it." Man will have to shake off his predatory habit of viewing all-natural products as his belongings and indulging his eternal greed at the cost of other species and ecosystems.

The agenda for reform is large and comprehensive. Accepting the challenge to accelerate development in an environmentally responsible manner will involve substantial shifts in policies and priorities and will be costly. Failing to accept the challenge will be costlier still. But, the value of this challenge becomes clear only when we realise that humanity is not distinct from nature but a part of it.